

CHAPTER 2

ANALYZING TRANSACTIONS: THE ACCOUNTING EQUATION

REVIEW QUESTIONS

1. It is necessary to distinguish between business assets and liabilities and nonbusiness assets and liabilities of a single proprietor because, according to the business entity concept, nonbusiness assets and liabilities are not included in the business entity's accounting records. These distinctions allow the owner to make decisions based on the financial condition and results of the business apart from nonbusiness activities.
2. The six major elements of the accounting equation are listed below.
 - a. Assets are items owned by a business that will provide future benefits.
 - b. Liabilities are items owed to another business.
 - c. Owner's equity is the amount by which the business assets exceed the business liabilities. Other terms used for owner's equity include net worth and capital.
 - d. Revenues represent the amount a business charges customers for products sold or services performed.
 - e. Expenses represent the decrease in assets (or increase in liabilities) as a result of efforts made to produce revenues.
 - f. Withdrawals, or drawing, reduce owner's equity as a result of the owner taking cash or other assets out of the business for personal use.
3. The three basic questions that must be answered when analyzing the effects of a business transaction on the accounting equation are as follows:
 - a. What happened?
 - b. Which accounts are affected?
 - c. How is the accounting equation affected?
4. The function of an income statement is to report the profitability of business operations for a specific period of time.
5. The function of a statement of owner's equity is to report the investments and withdrawals by the owner and the profits and losses generated through operating activities for a specific period of time.
6. The function of a balance sheet is to report the assets, liabilities, and owner's equity on a specific date. It is called a balance sheet because it confirms that the accounting equation is in balance.
7. The three basic phases of the accounting process are listed below.

Input—Business transactions are used as input to the accounting process.

Processing—The transactions are processed by recognizing their effects on assets, liabilities, owner's equity, revenues, and expenses.

Output—Output from the accounting process is provided in the form of financial statements.

Exercise 2-1A

<u>Item</u>	<u>Account</u>	<u>Classification</u>
Money in bank	Cash	<u>A</u>
Office supplies	Supplies	<u>A</u>
Money owed	Accounts Payable	<u>L</u>
Office chairs	Office Furniture	<u>A</u>
Net worth of owner	John Smith, Capital	<u>OE</u>
Money withdrawn by owner	John Smith, Drawing	<u>OE</u>
Money owed by customers	Accounts Receivable	<u>A</u>

Exercise 2-2A

<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Owner's Equity</u>
<u>\$44,000</u>	=	\$27,000	+	\$17,000
\$32,000	=	\$18,000	+	<u>\$14,000</u>
\$27,000	=	<u>\$ 7,000</u>	+	\$20,000

Exercise 2-3A

	<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Owner's Equity</u>
(a)	<u>27,000</u>				<u>27,000</u>
Bal.	<u>27,000</u>				<u>27,000</u>
(b)	<u>7,500</u>		<u>7,500</u>		
Bal.	<u>34,500</u>		<u>7,500</u>		<u>27,000</u>
(c)	<u>(1,600)</u>				
	<u>1,600</u>				
Bal.	<u>34,500</u>		<u>7,500</u>		<u>27,000</u>
(d)	<u>(2,300)</u>		<u>(2,300)</u>		
Bal.	<u>32,200</u>		<u>5,200</u>		<u>27,000</u>

Exercise 2-4A

	Owner's Equity											
	Assets	=	Liabilities	+	Capital	-	Drawing	+	Revenues	-	Expenses	Description
Bal. from E 2-3A (d)	32,200		5,200		27,000							
(e)	1,500							1,500				Service fees
(f)	(600)									(600)		Rent expense
(g)	(64)									(64)		Telephone exp.
(h)	(1,000)						(1,000)					
(i)	750							750				Service fees
(j)	(1,200)									(1,200)		Wages expense
(k)	400											
	(400)											
Bal.	31,586		5,200		27,000		(1,000)		2,250		(1,864)	
Total Assets			\$31,586	Total Liabilities					\$ 5,200			
				Capital					27,000			
				Drawing					(1,000)			
				Revenues					2,250			
				Expenses					(1,864)			
				Total Liabilities and Owner's Equity					\$31,586			

<u>Account</u>	<u>Classification</u>	<u>Financial Statement</u>
Cash	<u>A</u>	<u>BS</u>
Rent Expense	<u>E</u>	<u>IS</u>
Accounts Payable	<u>L</u>	<u>BS</u>
Service Fees	<u>R</u>	<u>IS</u>
Supplies	<u>A</u>	<u>BS</u>
Wages Expense	<u>E</u>	<u>IS</u>
Ramon Martinez, Drawing	<u>OE</u>	<u>SOE</u>
Ramon Martinez, Capital	<u>OE</u>	<u>SOE, BS</u>
Prepaid Insurance	<u>A</u>	<u>BS</u>
Accounts Receivable	<u>A</u>	<u>BS</u>

For Month Ended June 30, 20--

[illegible]

Exercise 2-7A

Betsy Ray's Accounting Service
Statement of Owner's Equity
For Month Ended June 30, 20--

Betsy Ray, capital, June 1, 20--		\$ —
Investment during June		20,000
Total investment		\$20,000
Less: Net loss for June	\$3,000	
Withdrawals for June	8,000	
Decrease in capital		(11,000)
Betsy Ray, capital, June 30, 20--		\$ 9,000

Problem 2-8A

	<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Owner's Equity</u>
1.	<u>\$26,960</u>		<u>\$ 7,550</u>		<u>\$19,410</u>
2.	<u>\$35,500</u>		<u>\$10,910</u>		<u>\$24,590</u>
3.	<u>\$32,040</u>		<u>\$12,910</u>		<u>\$19,130</u>

Problem 2-9A: See page 10

Problem 2-10A

Jay Pembroke
Income Statement
For Month Ended April 30, 20--

Revenues:		
Service fees		\$3,300
Expenses:		
Rent expense		750
Net income		\$2,550

Problem 2-9A

	Assets					=	Liabilities	+	Owner's Equity									
	(Items Owned)						(Amts. Owed)		(Owner's Investment)		(Earnings)							
	Cash	+	Accounts Receivable	+	Office Supplies	+	Prepaid Insurance	=	Accounts Payable	+	J. Pembroke, Capital	-	J. Pembroke, Drawing	+	Revenues	-	Expenses	Description
(a)	18,000										18,000							
(b)	(2,000)				4,600				2,600									
(c)	(1,200)						1,200											
(d)	1,300		2,000												3,300			Service fees
(e)	(2,300)								(2,300)									
(f)	(750)																750	Rent exp.
(g)	(100)												100					
Bal.	12,950		2,000		4,600		1,200		300		18,000		100		3,300		750	

Cash	\$12,950	Accounts Payable	\$ 300
Accounts Receivable	2,000	Jay Pembroke, Capital	18,000
Office Supplies	4,600	Jay Pembroke, Drawing	(100)
Prepaid Insurance	<u>1,200</u>	Service Fees	3,300
Total Assets	<u>\$20,750</u>	Rent Expense	<u>(750)</u>
		Total Liabilities and Owner's Equity	<u>\$20,750</u>

Problem 2-11A

Jay Pembroke			
Statement of Owner's Equity			
For Month Ended April 30, 20--			
Jay Pembroke, capital, April 1, 20--		\$	—
Investment during April			18,000
Total investment			\$18,000
Net income for April	\$2,550		
Less withdrawals for April	100		
Increase in capital			2,450
Jay Pembroke, capital, April 30, 20--			\$20,450

Problem 2-12A

Jay Pembroke			
Balance Sheet			
April 30, 20--			
Assets		Liabilities	
Cash	\$12,950	Accounts payable	\$ 300
Accounts receivable	2,000		
Office supplies	4,600	Owner's Equity	
Prepaid insurance	1,200	Jay Pembroke, capital	20,450
Total assets	\$20,750	Total liab. & owner's equity	\$20,750

Exercise 2-1B

<u>Account</u>	<u>Classification</u>
Cash	<u>A</u>
Accounts Payable	<u>L</u>
Supplies	<u>A</u>
Bill Jones, Drawing	<u>OE</u>
Prepaid Insurance	<u>A</u>
Accounts Receivable	<u>A</u>
Bill Jones, Capital	<u>OE</u>

Exercise 2-2B

<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Owner's Equity</u>
<u>\$25,000</u>	=	\$20,000	+	\$ 5,000
\$30,000	=	\$15,000	+	<u>\$15,000</u>
\$20,000	=	<u>\$10,000</u>	+	\$10,000

Exercise 2-3B

	<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Owner's Equity</u>
(a)	<u>30,000</u>				<u>30,000</u>
Bal.	<u>30,000</u>				<u>30,000</u>
(b)	<u>4,500</u>		<u>4,500</u>		
Bal.	<u>34,500</u>		<u>4,500</u>		<u>30,000</u>
(c)	<u>1,600</u>				
	<u>(1,600)</u>				
Bal.	<u>34,500</u>		<u>4,500</u>		<u>30,000</u>
(d)	<u>(2,000)</u>		<u>(2,000)</u>		
Bal.	<u>32,500</u>		<u>2,500</u>		<u>30,000</u>

Exercise 2-4B

	Assets		=	Liabilities		+	Owner's Equity							
							Capital	–	Drawing	+	Revenues	–	Expenses	Description
Bal. from E 2-3B (d)	32,500			2,500			30,000							
(e)	3,000										3,000			Service fees
(f)	(1,000)											1,000		Rent expense
(g)	(68)											68		Telephone exp.
(h)	(800)								800					
(i)	900										900			Service fees
(j)	(500)											500		Wages expense
(k)	500													
	(500)													
Bal.	34,032			2,500			30,000		800		3,900		1,568	
Total Assets				\$34,032		Total Liabilities					\$ 2,500			
						Capital					30,000			
						Drawing					(800)			
						Revenues					3,900			
						Expenses					(1,568)			
						Total Liabilities and Owner's Equity					\$34,032			

<u>Account</u>	<u>Classification</u>	<u>Financial Statement</u>
Cash	<u>A</u>	<u>BS</u>
Rent Expense	<u>E</u>	<u>IS</u>
Accounts Payable	<u>L</u>	<u>BS</u>
Service Fees	<u>R</u>	<u>IS</u>
Supplies	<u>A</u>	<u>BS</u>
Wages Expense	<u>E</u>	<u>IS</u>
Amanda Wong, Drawing	<u>OE</u>	<u>SOE</u>
Amanda Wong, Capital	<u>OE</u>	<u>SOE, BS</u>
Prepaid Insurance	<u>A</u>	<u>BS</u>
Accounts Receivable	<u>A</u>	<u>BS</u>

***Lopez Financial Consulting
Statement of Owner's Equity
For Month Ended June 30, 20--***

[illegible]

Exercise 2-7B

Lopez Financial Consulting		
Statement of Owner's Equity		
For Month Ended June 30, 20--		
Efran Lopez, capital, June 1, 20--		\$ —
Investment during June		15,000
Total investment		\$15,000
Less: Net loss for June	\$2,000	
Withdrawals for June	7,000	
Decrease in capital		(9,000)
Efran Lopez, capital, June 30, 20--		\$ 6,000

Problem 2-8B

	<u>Assets</u>	=	<u>Liabilities</u>	+	<u>Owner's Equity</u>
1.	<u>\$22,860</u>		<u>\$ 4,605</u>		<u>\$18,255</u>
2.	<u>\$27,425</u>		<u>\$ 8,515</u>		<u>\$18,910</u>
3.	<u>\$25,235</u>		<u>\$10,165</u>		<u>\$15,070</u>

Problem 2-9B: See page 16

Problem 2-10B

David Segal		
Income Statement		
For Month Ended October 31, 20--		
Revenues:		
Service fees		\$2,700
Expenses:		
Rent expense		650
Net income		\$2,050

Problem 2-9B

	Assets				=	Liabilities	+	Owner's Equity										
	(Items Owned)					(Amts. Owed)		(Owner's Investment)		(Earnings)								
	Cash	+	Accounts Receivable	+	Office Supplies	+	Prepaid Insurance	=	Accounts Payable	+	D. Segal, Capital	-	D. Segal, Drawing	+	Revenues	-	Expenses	Description
(a)	15,000										15,000							
(b)	(1,800)				3,800				2,000									
(c)	(1,000)						1,000											
(d)	1,700		1,000												2,700			Service fees
(e)	(1,800)								(1,800)									
(f)	(650)																650	Rent expense
(g)	(150)												150					
Bal.	11,300		1,000		3,800		1,000		200		15,000		150		2,700		650	

Cash \$11,300
Accounts Receivable 1,000
Office Supplies 3,800
Prepaid Insurance 1,000
Total Assets \$17,100

Accounts Payable \$ 200
David Segal, Capital 15,000
David Segal, Drawing (150)
Service Fees 2,700
Rent Expense (650)
Total Liabilities and Owner's Equity \$17,100

Problem 2-11B

<i>David Segal</i>		
<i>Statement of Owner's Equity</i>		
<i>For Month Ended October 31, 20--</i>		
<i>David Segal, capital, October 1, 20--</i>		\$ —
<i>Investment during October</i>		15,000
<i>Total investment</i>		\$15,000
<i>Net income for October</i>	\$2,050	
<i>Less withdrawals for October</i>	150	
<i>Increase in capital</i>		1,900
<i>David Segal, capital, October 31, 20--</i>		\$16,900

Problem 2-12B

<i>David Segal</i>			
<i>Balance Sheet</i>			
<i>October 31, 20--</i>			
<i>Assets</i>		<i>Liabilities</i>	
<i>Cash</i>	\$11,300	<i>Accounts payable</i>	\$ 200
<i>Accounts receivable</i>	1,000		
<i>Office supplies</i>	3,800	<i>Owner's Equity</i>	
<i>Prepaid insurance</i>	1,000	<i>David Segal, capital</i>	16,900
<i>Total assets</i>	\$17,100	<i>Total liab. & owner's equity</i>	\$17,100

MANAGING YOUR WRITING

The students should focus on the following differences:

1. An expense is an outflow of assets or increase in liabilities as a result of the efforts made to earn revenues. A withdrawal is an outflow of assets for the owner's personal use. The withdrawal is not related to the earning process.
2. A withdrawal that increases a liability would be unusual. Expenses often increase liabilities.

The student should focus on the following similarity:

1. Expenses and withdrawals reduce owner's equity.

Mastery Problem

1.

	Assets							=	Liabilities	+	Owner's Equity					Description						
	(Items Owned)							(Amts. Owed)	(Owner's Investment)			(Earnings)										
	Cash	+	Accts. Rec.	+	Sup-plies	+	Prepaid Ins.	+	Tools	+	Van	=	Accts. Payable	+	L. Vozniak, Capital		-	L. Vozniak, Drawing	+	Rev.	-	Exp.
(a)	8,000														8,000							
(b)	(150)																			150	Rent exp.	
(c)	(5,000)									5,000												
(d)									600				600									
(e)	(200)				300								100									
(f)	(100)																			100	Wages exp.	
(g)	(75)																			75	Adver. exp.	
(h)	(480)						480															
(i)	800																		800		Cleaning fees	
(j)			500																500		Cleaning fees	
(k)	(40)																			40	Telephone exp.	
(l)	200		(200)																			
(m)	(150)																			150	Wages exp.	
(n)	(200)												(200)									
(o)	600		200																800		Cleaning fees	
(p)	(100)																100					
2. Bal.	3,105		500		300		480		600		5,000		500		8,000		100		2,100		515	

Mastery Problem (Continued)

3.

We Do Windows
Income Statement
For Month Ended July 31, 20--

Revenues:		
Cleaning fees		\$2,100
Expenses:		
Wages expense	\$250	
Rent expense	150	
Advertising expense	75	
Telephone expense	40	
Total expenses		515
Net income		\$1,585

4.

We Do Windows
Statement of Owner's Equity
For Month Ended July 31, 20--

Lisa Vozniak, capital, July 1, 20--		\$ —
Investment in July		8,000
Total investment		\$8,000
Net income for July	\$1,585	
Less withdrawals for July	100	
Increase in capital		1,485
Lisa Vozniak, capital, July 31, 20--		\$9,485

Challenge Problem

Cash from customers		\$3,700
Cash paid for wages	\$450	
Cash paid for rent	300	
Cash paid for utilities	50	
Cash paid for insurance	600	
Cash paid for supplies	100	
Cash paid for telephone	35	
Total cash paid for operating items		1,535
Difference between cash received from customers and		
cash paid for goods and services		\$2,165

Yes, there is a difference of \$2,000. Net income does a better job of measuring profits because it offers a better matching of revenues and expenses. However, cash flows are important. If you don't have enough cash to pay your bills, you will go out of business.